

In concluding this summary of the projected work of the expedition it may be of interest to point out that the winter 1930-31 on Spitzbergen was unusually mild. In fact, at the end of March there was no ice in the expansive Icefjord and none on the sea in the immediate coastal region.

#### UPWELLING COLD WATER ON THE COAST OF NEW JERSEY

By CHARLES F. BROOKS

[Clark University, Worcester, Mass.]

On Sunday, July 7, 1929, while people were sweltering in New York City, others who had sought the Jersey coast were actually wearing coats. Mr. Henry B. Newhall reports that a friend of his, who has a summer home at Manasquan, was fishing in a lined fishing or hunting coat and was glad to have it on, but, he said that only a few thousand feet away from the shore it was pretty hot. They had had a strong S. to SE. wind for two or three days. The water, as somebody told him, as reported by the coast guards, was at unbelievably low temperatures—in the 40s.

In response to a request for the official temperatures, Assistant Commandant B. S. Chiswell, supplied the sea temperature readings for the first 15 days in July at Manasquan, N. J. They run as follows, beginning with the 1st; 47, 48, 52, 50, 48, 47, 46 (on the 7th), 50, 55, 60, 64, 68, 68, 70, 70 degrees. The sea temperature at Atlantic City from July 1 to 11, inclusive, as reported by Walcott L. Day, meteorologist, United States Weather Bureau, ranged from 62° to 67° and was 64° F. on the 7th. Atlantic City air temperatures that day ranged from 67° to 76° and on the preceding day 68° to 76° F. Winds on the 7th were S. to SW., 17 to 29 miles an hour. The wind on the 6th was of the same direction but averaged 16.4. Rather strong southerly winds prevailed also on the 4th and 5th, with average velocities of 18 and 20 miles an hour and maxima of 29 and 30, and an extreme 5-minute velocity of 32 miles.

On this occasion the S. to SW. winds which were on-shore for Atlantic City were off-shore for the coast of New Jersey farther north. The tendency of wind to blow water in the direction 45 degrees to the right of its own direction in the northern hemisphere would favor a rapid removal of surface waters eastward and the consequent upwelling along the coast.

In the MONTHLY WEATHER REVIEW for June, July, and August, 1920 (48: 352-353, 424, 477-478), there are notes on a similar occurrence, attending a usual frequency of off-shore winds that summer.

#### G. T. WALKER ON SEASONAL FORESHADOWING

[Reprinted from Science Abstracts No. 757]

*Roy. Meteorolog. Soc., J. 56, pp. 359-362; Disc., 362-364, October, 1930.*—The paper contains results obtained by the author and E. W. Bliss in applying various relationships in different parts of the world to predict abnormal seasons. The application has been made for: (1) Summer monsoon rainfall in Australia which gave 24 successes of excess or deficit in 28 years, 2 failures and 2 years normal; (2) South African rainfall; (3) winter temperature in southwest Canada, and (4) winter temperature in northwest Canada. It is considered unwise at present to issue a prediction except in years when the indications of excess or defect are so strongly marked as to give a chance of success of 4:1 or 5:1 and this occurs in only about half the years.

R. S. R.

#### ICE IN THE ARCTIC SEA, 1930<sup>1</sup>

[Report of the Danish Meteorological Institute]

The Danish Meteorological Institute has issued its report on the State of the Ice in the Arctic Seas, 1930. In European Arctic waters there was extraordinarily little ice. In the Barents Sea and around Spitsbergen open water was more extensive than in any other year during this century. So early as February, the ice edge in the Barents Sea was in the normal position of May and June, and by August it was lying north of the western islands of Franz Josef Land instead of some three degrees to the south. Bear Island was free from ice by April, and remained free throughout the summer. From the autumn of 1929 until April, 1930, the whole west coast of Spitsbergen was clear of ice. After a little ice in May and June, the coast was again completely clear, and in July and August, the ice edge lay in lat. 81° N. During August the entire archipelago was free from ice, and there was practically no ice between Spitsbergen and Franz Josef Land. The Kara Sea was clear enough to be navigable in August and September. On the east coast of Greenland the ice was fairly abundant until the autumn, when parts of the coast were easily accessible. Iceland was almost ice free throughout the year. In Davis Strait the amount of ice was below the normal. Hudson Strait and Bay were clear of ice in July and August. In contrast with these comparatively ice-free coasts, Alaska and eastern Siberia had the pack ice up to their coasts for most of July and August. In fact, the polar ice would appear to have been driven against these coasts rather than out into the Barents and Greenland Seas.

<sup>1</sup> Reprinted from Nature, London, May 30, 1931, p. 834.

### BIBLIOGRAPHY

C. FITZHUGH TALMAN, in charge of Library

#### RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Argentina. Dirección de meteorología.

Resultados de las observaciones aerológicas efectuadas con globos-pilotos en el observatorio regional Buenos Aires (Villa Ortúzar). Buenos Aires. 1931. 21 p. plates. 31½ cm. (Anales. T. 19. Contén. observ. prac. Año 1928. v. 1.)

Baur, F.

Bemerkungen zur Richardschen Witterungsvorhersage für 1930-1960. p. 470-471. 30 cm. (Zeit. des Ver. deutsch. Eisenbahnverwalt. Berlin. 71. Jahrg. 23. April, 1931.)

Bernheimer, Walter E.

Remarks concerning ultra-violet solar radiation. Lund. n. d. p. 17-24. figs. 29½ cm. (Repr.: Lund observ. circ. Nr. 2. March 31, 1931.)

Byers, Horace R.

Characteristic weather phenomena of California. A regional analysis based on aeronautical weather observations. With a chapter on winter fogs, by Wilbur M. Lockhart. Cambridge. 1931. 54 p. figs. plates. 28 cm. (Mass. inst. tech. Met'l papers, v. 1, no. 2.)

Edwards, K. C.

A B C of climate. London. n. d. 140 p. diags. 17 cm.

Gregg, Willis Ray.

Aeronautical meteorology . . . with the collaboration of C. G. Andrus, R. N. Covert, H. M. Hightman [and others] . . . 2d ed., rev. and enl. New York. [c1930.] xvi, 405 p. illus. plates. maps. diags. 22 cm.